

The Examiner has rejected Claims 1, 2, 4, 6, 7, 12, 13, 15, 20, 21 and 50 under 35 U.S.C. §102(e) as alleged being anticipated by Speller, Jr. et al. (U.S. Patent No. 5,829,115). This rejection is respectfully traversed. It is believed that the originally filed claims are patentably distinct over the cited reference. For example, the Examiner's comments in section 2 of the Office Action are incorrect since reference number 506 is actually a computer controller (see column 6, line 1, and column 8, line 3, of the Speller patent), and there only appears to be a single sensor 510 which is a rotary position/velocity sensor in order to monitor the motion of the armature shaft; this sensor is not used for "detecting a riveting characteristic occurring during the riveting process" as stated in independent Claim 1, and is not "operable to sense riveting force" as stated in independent Claim 12. Also, the Speller patent does not disclose an "electrical control unit operably determining if a riveted joint is within a desired range" as is recited in independent Claim 50.

Additionally, the Examiner's riveting force sensing inherency argument in Section 14 of the Office Action is respectfully traversed. While in a purely theoretical sense, velocity is mathematically related to acceleration which is one component of a force determination, there is no teaching in Speller that the mass of the components are known or that the control unit is capable of receiving, recognizing, determining, comparing, and/or using a rotational velocity signal in any manner related to actual riveting force. Even if the sensor of Speller is capable of generating a force signal (which is not admitted), there is no teaching in Speller that the controller is capable of recognizing and using the signal in any manner related to actual riveting force, thereby not teaching all of the elements of the presently claimed invention. The Examiner is

respectfully requested to reread the portions of the Speller reference pertaining to the armature sensor 510 and controller 506. Accordingly, it is respectfully requested that the instant rejection be withdrawn.

Claims 3, 8, 10, 11, 14, 51 and 52 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Speller, Jr. et al. in view of Gast (U.S. Patent No. 4,901,431). This rejection is respectfully traversed. All of the originally filed claims are believed to be patentably distinct over the cited references. Furthermore, the Examiner's assumptions as to general knowledge are respectfully challenged as lacking support, especially when this feature is taken in combination with the other claim elements. Additionally, there is no suggestion or motivation for combining the cited references, especially since significant reengineering would be required to combine the pneumatic/hydraulic system of Gast with the screw drive system of Speller (which teaches away from such a combination (see column 1, lines 20-27 and column 2, lines 11-18, of Speller)). Notwithstanding, this rejection is deemed moot in light of the allowability of the base independent claims. Accordingly, it is respectfully requested that the instant rejection be withdrawn.

Claims 5 and 16 have been rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Speller, Jr. et al. This rejection is respectfully traversed. It is believed that the originally filed claims are patentably distinct over the cited reference. Once again, the Examiner's assumptions of general knowledge are respectfully challenged as lacking support, especially in view of the presently claimed combination of elements. Notwithstanding, this rejection is deemed moot in light of the allowability of

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3, 8, 76, 77, 78  
in view of*

the base independent claims. Accordingly, it is respectfully requested that the instant rejection be withdrawn.

Claims 9 and 53 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Speller, Jr. et al. in view of Kinkel (DE 3301243). This rejection is respectfully traversed. It is believed that the originally filed claims are patentably distinct over the cited references. An English language translation of the Kinkel patent is enclosed. In contrast to the Examiner's assertions, neither of the cited references teaches, suggests or motivates an "electrical control unit [which] continuously compares actual workpiece thickness signals to previously stored workpiece thickness signals substantially during rivet setting" as is claimed in Claim 53. In contrast, Kinkel teaches use of a monitor, video camera and point-of-light lamp used to measure part thickness prior to insertion of the rivet into the riveting machine. Notwithstanding, this rejection is deemed moot in light of the arguments with regard to the base independent claims. Accordingly, it is respectfully requested that the instant rejection be withdrawn.

The Examiner has rejected Claims 1, 2, 4-7, 12, 13, 15-21 and 50 under 35 U.S.C. §103(a) as being unpatentable over Speller, Jr. et al. in view of Hatanaka (JP 04169828). This rejection is respectfully traversed. It is believed that the originally filed claims are patentably distinct over the cited references. All of the arguments on at least pages 10-15 of Appellant's Appeal Brief are incorporated herein. The Examiner's assumptions as to general knowledge are again respectfully challenged as lacking support, especially in light of the combination of other claim elements. Accordingly, it is respectfully requested that the instant rejection be withdrawn.

Claims 3, 8, 10, 11, 14, 51 and 52 stand rejected under 35 U.S.C. §103(a) as alleged being unpatentable over Speller, Jr. et al., Hatanaka and Gast. This rejection is respectfully traversed. It is believed that the originally filed claims are patentably distinct over the cited references. All of the arguments presented in Appellant's Appeal Brief on pages 15-19 are incorporated herein. Furthermore, this rejection is deemed moot in light of the allowability of the independent claims. The Examiner's assumptions as to general knowledge are again respectfully challenged as lacking support, especially in light of the combination of other claim elements. Accordingly, it is respectfully requested that the instant rejection be withdrawn.

The Examiner has rejected Claims 9 and 53 under 35 U.S.C. §103(a) as being unpatentable over Speller, Jr. et al., Hatanaka and Kinkel. This rejection is respectfully traversed. It is believed that the originally filed claims are patentably distinct over the cited references. There is no suggestion or motivation to combine the references as asserted by the Examiner. In fact, significant reengineering would be required to combine the screw drive of Speller with the hydraulic drive of Kinkel, especially when considering the teaching away from such a combination in the background of Speller. Notwithstanding, this rejection is deemed moot in light of the allowability of the base independent claims. Accordingly, it is respectfully requested that the instant rejection be withdrawn.

Claims 22-30, 33, 34, 43 and 44 have been rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Speller, Jr. et al. in view of Cotterill et al. (U.S. Patent No. 5,752,305). This rejection is respectfully traversed. It is believed that the originally filed claims are patentably distinct over the references cited. The

arguments presented in Appellant's Appeal Brief on pages 19-24 are incorporated herein. Furthermore, the Examiner's statement as to obvious design choices is respectfully challenged as lacking support, especially when viewed in combination with the other claim elements. Accordingly, it is respectfully requested that the instant rejection be withdrawn.

The Examiner has rejected Claims 31, 32, 35-42 and 45-47 under 35 U.S.C. §103(a) as allegedly being unpatentable over Speller, Jr. et al., Cotterill et al. and Gast. This rejection is respectfully traversed. It is believed that the originally filed claims are patentably distinct over the cited references. The arguments presented in Appellant's Appeal Brief on pages 24-27 are incorporated herein. Furthermore, the Examiner's statement as to design choice is respectfully challenged as lacking support, especially when considered with the combination of other claim elements. Accordingly, it is respectfully requested that the instant rejection be withdrawn.

Claim 48 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Speller, Jr. et al. in view of Hatanaka and Gast. This rejection is respectfully traversed. The originally filed claim is believed to be patentably distinct over the cited references. The arguments presented on pages 28-32 of Appellant's Appeal Brief are incorporated herein. Accordingly, it is respectfully requested that the instant rejection be withdrawn.

Claim 49 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Speller, Jr. et al., Hatanaka, Gast and Cotterill et al. This rejection is respectfully traversed. It is believed that the originally filed claim is patentably distinct over the cited references. The arguments presented on pages 32-36 of Appellant's

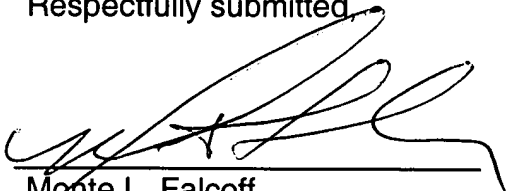
Appeal Brief are incorporated herein. Accordingly, it is respectfully requested that the instant rejection be withdrawn.

As a general comment to all of the preceding 35 U.S.C. §103(a) rejections, the Examiner has not properly considered the significant secondary considerations presented throughout the prosecution of the present application. For example, the Examiner has very casually dismissed the multiple declarations filed in the present application. How do the Examiner's arguments made in Paper No. 8, dated July 10, 2002, reflect the Declaration of Ralf England filed on December 12, 2002 and the certified translation of the Audi Declaration filed on October 10, 2002? All of the declarations present noteworthy evidence of commercial success. Also, the background of the Speller patent teaches away from being combined with all of the pneumatic and hydraulic drive riveting machines presented by the Examiner.

In view of the instant amendments and remarks, it is submitted that the present application is in condition for allowance. Accordingly, it is requested that the Examiner pass the case to issue at his earliest convenience.

Respectfully submitted

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